



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## ART. VII. — HOW SHALL THE NATION REGAIN PROSPERITY?

How shall we as a nation extricate ourselves from the present hard times and regain material prosperity, is a question that comes very close to the interests, moral as well as material, of every man, woman, and child that helps constitute the nation, whatever may be their social position, occupation, or sectional location.

It is proposed to here attempt to contribute something in the way of fact and argument in answer to this question; or something which, if not a full answer, may at least help the people of the United States to determine what course of policy on the part of their government, in respect to economic and fiscal matters, will be most likely to effect the result which all agree is most desirable.

And, first, a word in the nature of general propositions. All wealth, meaning thereby property or material abundance, is the result of labor. Persons acquire and accumulate wealth by means other than labor, in the sense of physical toil, but no one produces wealth or abundance without labor.

Again, the results of labor exerted for production *under the same circumstances* as respects natural and accumulated capital, intelligence, and physical energy, are wonderfully equal all the world over; so equal that, *other things being equal*, one man's labor will exchange for another man's everywhere. In fact, there is nothing so permanent and so uniform and so equal in value as labor; and wages are nearly identical in all places, when measured by the same standard. Property or wealth (in the sense of the results of embodied or accumulated labor, which alone constitutes property or wealth) being once acquired, no nation or individual can increase such property or wealth by merely making or multiplying titles to it, and then counting the actuality as one property, and the title — as a debt, a promise to pay, written or printed, or a mortgage — based on it as another and distinct property; nor can property be increased by adopting and using a big unit or standard for measuring it. These propositions, as thus stated, may seem in the nature of truisms; and yet there are few subjects in respect to which peo-

ple in general, and the people of the United States in particular, are more inclined to deceive themselves. Thus, by most courts and legislators, and by many writers of eminence on law, finance, and political economy, debts are still regarded as property, as rightful subjects for taxation, and as rightfully included in valuations of the aggregate wealth of communities or of the nation, although each man's individual experience unerringly teaches him just the contrary. Again, the delusion we are apt to take upon ourselves from not clearly perceiving that the actual results of labor cannot be varied by varying the units or standards employed to measure or estimate them, is also very remarkable. Thus, with labor at three dollars per day, and the value of the products of labor measured proportionally, the aggregate product or wealth of the United States appears enormous. In China, on the other hand, they have neither debt, paper-money, nor coin; and the real standard of value — labor — is on the average twenty cents per day. Consequently taxes are small, revenue small, expenditure small, and country poor, according to our arithmetic. Other things being equal, however, the annual product of labor in the two countries will be in proportion to numbers; and by this rule the aggregate product of China to that of America should be in the ratio of five hundred millions to some forty-three millions.\* Change now the standard for measuring the value of the product of the labor of these millions; reduce wages in the United States to twenty cents per day, and raise wages in China to three dollars per day. America will then appear most poor, while figures could hardly compute the value of the product of China. Yet nothing would be really changed, and yet nothing more uncommon than right notions on this subject.

So much in the way of propositions, the correctness of which, it is believed, cannot be impugned. Let us next see what in the way of deductions we are legitimately warranted in making from these propositions.

If labor is the source of all wealth, if labor under the same circumstances will produce equal results, then that country which possesses the greatest natural resources, which commands the most energetic and intelligent labor, which avails itself to

---

\* Examination of Chinese archives at Peking, instituted by the Russian Legation, indicates that the population of China in 1860 was in excess of five hundred and thirty millions.

the largest extent of labor-saving machinery and processes, which has the best and cheapest facilities for intercommunication, and the freest and most enlightened government, ought to produce to greater advantage than any or all other countries, ought to produce the most for the expenditure of a given amount of labor, ought to be able to sell cheapest, ought, finally, to take the first place in the race for industrial and commercial supremacy among the nations.

Now, the United States confessedly in very many respects occupies these positions of advantage. It is a country fitted by nature, and by the character of the people who occupy and possess it, to be a country of abundance. A given amount of labor under existing circumstances will here produce more, on the average, of the essentials of a comfortable livelihood than any similar area on the earth's surface. The evidence on this point is too conclusive almost to admit of even formal questioning. All the world has admitted it, for the *surplus* population of all the world, possessed of sufficient information to form an intelligent opinion in respect to their material interests, has rushed here to live. Men do not often think, when they hear or read of the hordes of Goths, of Vandals, or of Huns, which in the olden time rolled in upon the civilization of Southern Europe to obliterate or destroy, that, momentous as were these movements of population in respect to historical results, they were nevertheless, in point of numbers, especially if we take time into consideration, small in comparison with the wave of immigration which, impelled by peaceful motives, has flowed in upon the United States from other countries during the period from 1840 to 1873 inclusive (8,038,195),\* to industrially produce and develop. Other evidence on this point, no less striking, is to be found in the rates of wages and of interest which for many years have prevailed in the United States, and which, as is well known, have been greater than in most other countries. But capitalists and laborers have received large remuneration in the United States simply and solely because their industry has produced largely. Wages being labor's share of the product of labor, and interest capital's share of the same product,

---

\* Gibbon estimates the number of the entire Gothic nation, "of both sexes and all ages," which crossed the Danube in 876 A. D., at only "near a million." The army of Huns led by Attila into Gaul in 451 A. D. is estimated at 700,000.

neither wages nor interest can be large in any country unless the general average product resulting from the employment of labor and capital is also large. The late Professor Cairnes of London one of the most careful observers and thinkers, a few years ago made an estimate, based on the best available industrial statistics for 1868-70, to the effect that in the commercial dealings of the several nations the product of a day's labor in the United States ought to enable "a workman to command the product, in round numbers, of a day and a third's labor in Great Britain; the product of a day and a half's labor in Belgium; the product of from one and three quarters to nearly two days' labor in France and Germany; while it probably would command the product of four or five days' labor in China and India." In truth, there are no criteria which better indicate the relative material prosperity of nations and communities than the rates of interest and wages which they are permanently willing and able to pay; high rates prevailing of necessity in countries where the products of labor and capital are comparatively large, and low rates of necessity in countries where the products of labor and capital are comparatively small. Wages at the present time are comparatively low, and declining in the United States, because, owing to various circumstances, the results of labor are not largely remunerative to employers. Again, there is no more capital in the country than there was four years ago, when the rates of interest were high,—probably not so much, for the multitudes of workers who have been idle during the last four years have been consuming rather than creating capital, as they have had to live, even if idle; and if rates of interest depend mainly, as many suppose, upon the abundance or scarcity of capital, interest at present ought to rule high. But so far from ruling high, it never was so low, and simply because the profit resulting from any use that capital can now be put to in the United States is not sufficient to justify a high rate of interest.

The circumstance that wages and interest have been and are now higher in the United States than in most other countries is often dwelt upon by men claiming to be statesmen and economists, as if it constituted a disadvantage to the country in making its foreign exchanges, which it was necessary to guard against and counteract by legislation. But permanent high wages and large interest in any country where life and property are reasonably

secure simply means that the country is in possession of such special resources and facilities as enable its labor and capital to produce abundantly and cheaply, and so exchange to the maximum of advantage with other countries; and any man who claims that they mean anything else either perverts the truth or has no clear conception of what he is talking about.

The fact that up to within a very recent period there have been but comparatively few paupers in the United States, and that even now it is doubtful whether we have anything corresponding to the permanent pauper classes of Europe, also constitutes an item of evidence alone almost conclusive of the correctness of the assumption that in respect to facilities for producing useful things easily and cheaply, the United States enjoy advantages superior to those of most other countries.

Passing now from premise to conclusion, from hypothesis to reality, the actual condition of the country will be found to be as follows: every section filled to overflowing with its peculiar useful products,— the South, with cotton, the staple textile fibre of the world's clothing; the West, with meat and grain; the Northwest, with lumber and with leather; the Middle States, with coal and iron; New York and New England, with textile and other manufactures,— and everywhere labor ready to augment these products, or elaborate them into higher forms of fabrication.

Under such circumstances all the world ought to come to the United States to buy, or, what is the same thing, exchange; or, to adopt the language of the eminent foreign authority before quoted, Professor Cairnes, who, taking the several facts in the case, and reasoning about them coolly and dispassionately, as would an expert in reference to a case in law, medicine, or mechanics, was led to say (as recently as 1874) that, "having regard to the geographical position, extent of territory, and extraordinary natural resources of the United States, as well as the character of its people, trained in all the arts of civilization, and distinguished beyond others by their eminent mechanical and business talents, there seems to be no reason why they should not take a position of commanding influence in the world of commerce,— a position to which no other people on earth could aspire." But most curiously all the world does not come here to buy, but for a great variety of products which we specially want to sell, and the world specially wants to consume,

turn away and buy elsewhere; and, as a consequence, the cry is everywhere throughout the land, that in the midst of our abundance there is no demand for our abundance; and because there is no demand, the labor and machinery employed in production cease to find employment for further production. Hence wages cease to be earned and paid, and the laborer starves. Hence corporate and other investments of accumulated capital become unremunerative and as real estate derives its entire value from the value of labor or accumulated labor, which alone is property, connected with or reflected upon it, as these values shrink, real estate depreciates also and becomes unsalable. The country is therefore suffering to-day, strange as the proposition may at first thought seem, not because we have not, but because we have; not from scarcity, but from abundance; and the thing which to-day prevents the owners and controllers of productive instrumentalities from putting them into full operation is the fear of increasing that abundance, and the knowledge that inability to dispose of it will result in its being kept or carried by the producers at a loss.

But lack of demand for things essential to maintain life, or the use and consumption of which augments the comfort and pleasure of living, must proceed from one of two causes,—either lack of desire to have, or inability to obtain for the purpose of satisfying desire. But lack of desire to have the good things of this world presupposes either that human nature has changed; that human wants and appetites no longer exist, or that the millennial period has come when every one is supplied with all that they want without effort. Absurd as all this is, people nevertheless do not talk as if it was absurd, for we continually hear it asserted that the country is over-producing. Now, that there may be injudicious production of certain forms of product in certain sections, from a lack of appreciation on the part of producers of the continually changing relations between supply and demand, and that demand for certain products may greatly diminish or entirely cease because through invention or discovery other products have come to be more useful or cheaper, is undoubtedly true. Examples of the first are continually occurring in agriculture and manufactures; while of the second, no more striking illustration can be found than the permanently diminished demand for iron rails in consequence of the greater usefulness and comparative cheapness of the

product resulting from the improved processes discovered by Bessemer. But taking the world as a whole, there can be no such thing as over-production of things necessary or desirable; and what is more, there never will be so long as any backs and sides are bare, hands and feet cold, or stomachs of human beings have not enough of food in them to satisfy. Any lack of demand for useful and desirable products which may exist must therefore be referred to inability on the part of those who desire to obtain; and to find out wherein this inability consists, with a view of remedying it, and thereby increasing demand, and consequently production and exchange, or, as it is commonly termed, *business*, is the problem that next offers itself for investigation.

And in entering upon this investigation the first fact in order to be noted is that, for the time being at least, *the power of purchase* to nations, communities, and individuals, so far as such power resides in accumulated labor, has been abridged; or, in other words, the so-called civilized nations of the world are not as rich as they might and ought to have been, inasmuch as for the last sixteen years especially they have been diligently wasting their capital, or placing it under conditions which will not permit of its ready use for productive purposes. It is not proposed to here enter into any extended details on this subject. But, in order to indicate somewhat of the nature of these details, it may be mentioned that since 1860 the national debts of the world, incurred mainly for war purposes, have been increased by a sum larger than ten thousand millions of dollars; that at least an equal amount, taken from current annual product, was expended during the same period for similar unproductive purposes; and that a *third equal sum* will probably fail to represent what has been invested during the same time in enterprises, industrial or productive in their inception or purport, but which are now unproductive in the sense of returning any income to those who contributed.\* A part of this latter aggre-

---

\* The fact is now very generally recognized, that the capital which, under the stimulus of war and a vicious fiscal policy, has been invested in the United States since 1860 in iron-works and woollen-mills, and which represented the savings for years of the labor of a very large number of persons, has been in great part as much wasted as though destroyed by fire or sunk in the ocean. A most remarkable item of evidence in support of this statement is to be found in a communication on the state of the Woollen Goods Trade in the United States, made to the New York World under date of February 17, 1877, by one of the most prominent manufactur-



gate undoubtedly represents change in the distribution, and not absolute waste of capital or wealth; but the items of loss omitted in any such estimate, and of which it is impossible to take more than general cognizance, would, if obtainable, undoubtedly carry the aggregate of the destruction or impairment of the world's capital since 1860 far above the sum of the figures above mentioned. Had all these losses fallen exclusively upon the United States, they would have been equivalent to the destruction or transfer of all its existing accumulated wealth,—the result of all the capital earned and saved, or brought into the country, since it became the abode of civilized man. In the case of Prussia, a country of small fortunes and small incomes, the losses sustained by 432 joint-stock companies since 1872, as measured by the fall in the market prices of their stocks, has been recently shown by Dr. Engle, of Berlin, to be equal to nearly six years of the public revenue, and to represent a very large part of the comparatively small savings of that nation. In short, the world, for the last fifteen or sixteen years, has been specially wasting its substance,—playing on a great scale the part of the Prodigal Son,—and such a course, if persisted in, will, in virtue of a common law, ultimately bring nations as well as individuals alike to the husks. Such, however, through invention and discovery, has been the comparatively recent increase in the world's power of production, that resort to the husks need be but temporary; and were it not for continued war expenditures and bad economic laws, the restoration of the world's impaired wealth, through economy or increased industry, would soon be effected.\*

---

ing firms in New England (Mudge, Sawyer, & Co.), in which they state “that there would be no improvement in the [woollen goods] trade until the mills ceased over-production; that if one half of the machinery were stopped or burned the general trade would be good; that there was too much woollen machinery in the country for our market; and that, as we could not export any description of woollen goods, we should have to wait for the growth of the population or the wearing out of the machinery.” Or, in other words, in the opinion of those best qualified to judge, one half of the capital invested in the woollen manufacturing industry of the country (worsted goods excluded), amounting, according to the last census (1870) to \$49,400,000, is so useless and harmful that the general interests of the trade would be improved if the buildings, machinery, etc., which represent and embody such capital, were subjected to conflagration or compulsory inaction.

\* “Our present aggregate debt, which seems so large, is but a trifle in comparison to the power of production. One has said, ‘Mankind is as lazy as it dares to be, and

It is the opinion of Mr. Edward Atkinson, founded on data somewhat hypothetical but warranted (and with which the writer of this article after careful consideration and review agrees), that, with the existing power of production in the country, about twenty-five minutes' extra labor per day, on the part of its adult male working population, would suffice to defray all the interest on our present national, State, and municipal debt, and establish a sinking-fund sufficient to extinguish the aggregate principals of the same, provided a market and sale could be obtained for the resulting products of such labor at substantially existing prices.

The next important factor in this problem of inability to purchase and consequent lack of demand, and one which has not hitherto received the attention its importance entitles it, grows out of, or rather in itself is, this very increase in the power of production to which allusion has just been made; and which, although affecting in a greater or less degree the industrial condition of all countries, has of late probably manifested itself more remarkably in the United States than elsewhere.

Omitting anything in the way of preliminary discussion on this point, and coming directly to the consideration of hard, positive facts, attention is first asked to a remarkable analysis of the conditions of producing cotton cloth in 1838 and 1876, as recently presented to the New England Cotton Manufacturers' Association by Mr. William A. Burke of Lowell, Mass., and founded upon the records of the operations of one of the Boott Mills in that place in the respective years mentioned. The important fact brought out in this analysis is, that 90 operatives (men and women) engaged in the manufacture of cotton in one of the best mills in Massachusetts, produced regularly in 1876, with  $16\frac{1}{2}$  hours' less labor per week, more cloth measured in pounds, and of nearly the same quality (No. 13.64 yarn being spun in 1838 and No. 13.93 in 1876),\* than 231 operatives working in the same mill

---

no state or nation ever works to its full capacity except when an emergency calls out its force. The large ratio which production bears to accumulation, taken in connection with the fact that whenever a necessity to use any commodity, or an opportunity to sell occurs, production at once increases, indicates that the additional effort called for to pay debt can be executed at any time. The only difficulty is to adjust the method of taxation by which the debt is paid, so as not to impede production or exchange." — EDWARD ATKINSON, *American Social Science Association, Saratoga Meeting, 1876.*

\* The average product of each operative in the Boott Mill, working one hour, in

did in 1838. Other results of interest shown by this analysis are, that the cotton-mill (male) operative of Massachusetts in 1876, working 60 hours per week, receives 40 per cent more in wages than did the operative of 1838, similarly working  $76\frac{1}{2}$  hours per week;—women 47 per cent more: that the average profits on the capital employed in the same manufacture have not increased *relatively* during the same period in anything like the same proportion, and probably are not as great absolutely to-day as they were forty years ago; \* that the standard of health among cotton operatives is higher now than formerly, and the standard of intelligence lower; *twenty-five* per cent making their marks on the pay-roll of 1876, as compared with *eleven* per cent who thus signed in 1838.

Taking up this investigation at the point where Mr. Burke leaves it, Mr. Edward Atkinson of Boston has next been led to the conclusion that the value of the food and fuel products purchased and consumed by the cotton-operatives of Massachusetts in 1838 was, on an average, about \$ 200 per annum for each person; or that the 231 operatives in Boott Mill No. 1 of Lowell, and a like number in every other similar cotton-factory in New England, in 1838 consumed, in the aggregate, food and fuel products—mainly of American production—to the extent of about \$ 46,000 per annum; and also that it then required the labor of 460 farmers, miners, and other laborers, working slowly and imperfectly, and earning each, over and above the subsistence of himself and family, a surplus of \$ 100 per annum (an estimate probably in excess of the average surplus earnings of this class of American producers for the time), to supply this food and fuel requirement to the 231 cotton-operatives. The ratio of economic or industrial equilibrium between cotton-cloth producers and the producers of other commodities essential to a comfortable livelihood in 1838, in the United States, was, therefore, approximately as 231 to 460.

Since then, as already shown, 90 cloth producers have come

---

1838 was 1.012 pounds of cotton fabric, No. 13.64 yarn, 2.91 yards to the pound; and in 1876, 3.333 pounds of fabric, No. 13.93 yarn, 2.85 yards to the pound.

\* In the analysis of another Lowell mill—the Jackson—submitted at the same time to the Association (through Mr. Burke, by its treasurer, Frederick Amory, Esq.), the net profit per yard produced was estimated at 1.86 cents for 1838, and .948 cents for 1876.

to be able to make as much cloth in 1876 as 231 similarly employed persons could do in 1838; while the annual *per capita* cloth consumption of the country has not materially increased during the same period, and, measured in pounds, has sensibly diminished.\* But, at the same time, increased power of production and supply has also come to the producers of useful things other than cloth; and to such an extent, especially to the producers of food in the United States, through improved agricultural machinery and larger and cheaper facilities for transportation, that the labor of one farmer on the fertile lands of the West will probably go as far in 1876 toward feeding the cotton-mill operatives of Massachusetts as the labor of two farmers could have done in 1838. The change which has taken place in the economic relations of the cloth-makers and food-producers of the United States since 1838, in consequence of these increased facilities for production, is probably, therefore, somewhat as follows:—

Ninety cotton-operatives, with an average annual food-purchasing power each of \$300 (increased from \$200, since 1838, by increase of wages), will now purchase and consume farm-products, or their equivalents, to the aggregate value of \$27,000 per annum; requiring the present labor of 135 farmers, producing \$200 per annum through improved machinery and processes (as compared with \$100 in 1838) over and above the subsistence of themselves and families. The ratio of industrial or economic equilibrium

---

\* The average consumption of raw cotton for spinning (excluding demand for upholstery and the like) in the United States, from 1849–50 to 1875–76 inclusive, is estimated by Mr. B. F. Nourse, of Boston, to have been as follows: from 1849–50 to 1860–61, inclusive, a period of twelve years, an average of 11.35 lbs. *per capita*; from 1865–66 to 1875–76 inclusive, a period of eleven years, 11.37 lbs. *per capita*. In an address before the New England Cotton Manufacturers' Association, April, 1876, Mr. Edward Atkinson of Boston stated as a deduction from his investigations, capable of absolute proof, "That the production of cotton fabrics in 1876, other than printing cloths, consisting of sheeting, shirting, drills, and colored goods, is no more, probably less, than it was in 1859 and 1860, in proportion to the population of the United States"; or including printing cloths, that the net product of cotton goods for home consumption was 22.59 yards per head in the United States in 1875 as compared with 24.16 in 1860.

Comparing 1875 with 1860, an estimate of Mr. Nourse shows a decrease in the consumption of cotton for spinning, *measured in pounds*, in the ratio of 10.29 lbs. *per capita* in 1875 to 11.25 lbs. in 1860; but, on the other hand, a very considerable absolute increase in production *measured in yards* in 1875, as compared with 1860; lighter, finer, and less durable goods being worn at the present time, especially by the colored population of the South, than before the war or prior to 1860.

between cotton-cloth producers and the producers of other commodities essential to a comfortable livelihood in the United States in 1876 was therefore approximately as 90 to 135; or, in other words, the labor of 225 persons is as effective in 1876 in meeting the demands of the country for cloth and food products as was the labor of 691 persons in effecting similar results in 1838; and as a consequence of this change in the power of production, the labor of 466 other persons have, within this time and within the special industrial sphere under investigation, been rendered unnecessary; and they have been compelled to enter into relations with new wants and new capabilities of purchase in order to find employment. Results similar, and possibly even more striking, are afforded by the analysis of other leading American industries. Thus, in the manufacture of boots and shoes, three men working with machinery can do at present what, prior to 1860, required the labor of six men to effect; while the individual or *per capita* consumption of boots and shoes in the United States has probably been more uniform during the same period than is the case with almost any other commodity. At a convention of the stove-trade last year (1876) in St. Louis, it was also officially reported, that under what may be called a healthy trade there was at least 33 per cent greater present capacity for making stoves in the United States than the country requires; and that three men now, with the aid of machinery, can produce as many stoves as six men unaided could have done in 1860. In the manufacture of straw-goods, 300 hands in one of the largest factories in New England do more with the sewing-machine than what a comparatively few years ago required a thousand to effect when sewing of the braid was done by hand; and the steam-press turns off four hats to the minute, in place of the old rate of one hat to four minutes. Similar results, derived from the consideration of our industries as a whole, are also given in the last national census, which shows that while the increase in population in the United States from 1860 to 1870 was less than 23 per cent, the gain in the product of our so-called manufacturing industries during the same period, *measured in kind*, was 52 per cent, or near 30 per cent in excess of the gain in population.\*

---

\* A comparison of the conditions and results of manufacturing in the city of Cincinnati, published in the New York Commercial Bulletin, during the past year

The changes affecting labor in trade and commerce within a comparatively recent period, consequent upon the use of the telegraph and greatly increased facilities for transportation, have also been not less remarkable than those which have occurred in agriculture and manufactures, through the introduction and use of labor-saving machinery and processes. In place of large stocks of many of the leading articles of commerce being kept in store as formerly at nearly every important centre of population, to be distributed to local consumers through the agency of jobbers or middle-men, consumers, especially for manufacturing purposes, now more and more order direct through the agency of the telegraph, as supplies are needed, from the great centres of production, and at producers' prices, thus doing away with the services of a large number of intermediates and a great variety of expenses and profits incidental to repeated transfers and handlings. The number of lumber-yards, for example, in one of our large seaboard cities is reported to have been reduced fifty per cent within the last few years by the operations of a single agent representing one large source of lumber-supply hundreds of miles distant, and occupying, with one or two

(1876), included the following curious table, in illustration of the relative increase in the number of persons employed and the quantities produced in the various leading industries of that city during the period embraced between the years 1840 and 1876 :—

	Increased	In persons employed.	In amount produced.
Iron manufacture.....	7 fold.	10 fold.	
Other metals .....	5	8	
Wood .....	6	6½	
Leather .....	5½	7	
Food .....	3½	4½	
Soap, candles, and oil.....	7	22	
Clothing .....	12½	6½	
quors .....	17	80	
Cotton and hemp .....	2½	4	
Drugs and chemicals .....	4	8	
Stone and earth .....	7	15	
Carriages, cars, etc.....	14½	18	
Paper .....	4	2½	
Bookbinding, blank-books.....	6	7	
Printing and publishing .....	2	4	
Tobacco .....	6	8	
Fine arts .....	2½	4	
Miscellaneous .....	4		

It was also stated in the same connection that, in 1840, 9,000 persons employed in manufacturing in Cincinnati produced 16½ millions per annum in value, or at the rate of \$1,500 per head; while, in 1875, 61,000 persons produced annually manufactures to the value of \$144,000,000, or \$2,300 per head.

clerks, a single office near the centre of the circle of his local demand and consumption. Nor are these influences restricted to domestic exchanges. The submarine cable, connecting continents, works as regularly and reliably as the overland wire, and is used in precisely the same manner as an instrumentality for effecting exchanges and distributing information. The price and stock on hand, or *en route*, and the prospect of supply of tea, in China, tin in Singapore, coffee in Brazil, wool in Buenos Ayres, or cotton in Texas,—information formerly the basis for the commercial transactions of a few,—are now as readily at the command of the smallest operator as of the largest house; and seaboard cities with capacious harbors, in place of being termini, as formerly, are yearly becoming more and more intermediate stations on the great lines of transportation for distribution, or, as a recent writer has expressed it, a city thus located “is at the wrong end of a railway.”

One of the most striking illustrations under this head is afforded in the case of the Suez Canal, the opening of which at the close of the year 1869, and its subsequent use, especially from 1870 to 1873, is regarded by the “London Economist” (Commercial History and Review of 1875) as sufficiently important to stand by itself and be cited as one of the agencies especially responsible for what it calls “the present diffused commercial depression.” Some of the remarkable results which have attended and followed the completion of this great enterprise have been thus reported: It diverted from employment and rendered comparatively useless, between 1870 and 1875, about two millions sailing-vessel tonnage, and substituted steam tonnage, passing through the canal. It shortened the time for operations in India produce in Europe to the extent of certainly one half, and probably five sixths; and this economy of time, conjointly with the use of the telegraph, has not only obviated the necessity of accumulating and carrying large stocks of India produce in Europe, which were essential when every Indian order necessitated six months after it was given for its fulfilment, but has also correspondingly diminished the great advantage which England formerly enjoyed in this trade from her immense capital and credit. It has restored in a degree to the Mediterranean ports the commerce of India, of which they were so disastrously deprived at the close of the fifteenth century by

the discovery by Vasco da Gama of the route by the Cape of Good Hope. Or, to sum up, it has rendered unnecessary so large and so costly an amount of the old machinery of an important branch of the world's trade, — warehouses, sailing-vessels, capital, six-months' bills, and the merchant himself and his retinue of employees, — and has so altered and twisted so many of the existing modes and channels of business, as to cause immense losses, mischief, and confusion.

This remarkable increase in the power of production and distribution here pointed out, with the consequent derangement and displacement of labor, is not, however, any new thing, nor confined to any one country. But there is novelty in its present method of manifestation, especially in the United States; and it is to this manifestation that attention is now specially solicited.

Prior to 1860, say from 1838 (the period adopted as a starting-point in the analysis of the manufacture of cotton cloth above given) to 1860, this increase was gradual and uniform in the United States; so gradual and uniform that labor without any perceptible shock as gradually adjusted itself to its new conditions. The gold discoveries of California and Australia made during this period, and the consequent transfer of a vast amount of labor to new employments and new localities, the creation of new markets, and the general stimulus given everywhere to consumption, also helped greatly to make easy any readjustment of the conditions of labor which continued progress in the powers of production and distribution made necessary. It should be also borne in mind that during most of this period, or from 1846 to 1861, the market in foreign countries for those products of the United States which require the greatest amount of labor to fit them for consumption rapidly enlarged, and became greater, absolutely and relatively, in 1859 and 1860 than at any other period in the history of the country, from the adoption of the Constitution down to the present time (1877).

The outbreak of civil war in 1861, and its vigorous prosecution until 1865, acted as an immense stimulus to invention and discovery in the Northern States, and led to an application of labor-saving machinery and methods to the work of production which, taking time into consideration, has probably no parallel in the world's experience. Such a result was, however, almost necessary,



in order that the nation might live, and not be crushed by the burden of its war expenditures and the diversion of a large proportion of its industry from productive to destructive purposes. With certainly not more than five millions of male adults engaged in agriculture, mechanic arts, manufactures, and transportation in the Northern States in 1860, the close of the war in 1865, found more than a million of adults enrolled in the service of the Northern armies. But the industrial products of these same States, especially the products of agriculture, did not, however, in general decrease during the war-period by reason of the diversion of labor noted; but, on the contrary, and mainly through the invention and use of labor-saving machinery, they largely increased. Thus, for example, the amount of wheat raised in Indiana in 1859 was 15,219,000 bushels; but in 1863, notwithstanding this State, out of a population in 1860 of 1,350,000, had furnished to the army more than 124,000 fighting men, its product of wheat exceeded 20,000,000 bushels. And what was true of Indiana was also true of Iowa, Illinois, and other agricultural States, and in respect to productions other than wheat. At the close of the war, with stocks of industrial products of almost every kind — except cotton and woollens — reduced to a minimum in the Northern States, and the South, with a population of twelve millions, destitute of nearly everything essential to the continuance of civilization, and yet possessing large purchasing power through the enormous advance in the price of the raw cotton\* that remained to them, the full productive power of the country continued in full demand. And after the vacuum of product of every kind occasioned by the war had been supplied, there came on, with full effect, the stimulus of an excessive issue of irredeemable currency, and an unprecedentedly high tariff; under the joint influence of which, coupled with thoroughly unsound and extravagant ideas engendered by the war, and pervading the whole community, on almost all economic subjects, works for production and distribution of products, — mills, mines, furnaces, railways, and buildings, — far in excess of any legitimate wants of the country, were undertaken and vigorously prosecuted. Labor, also, influenced by like ideas, worked less, measured in

---

\* The value of the raw cotton exported the first year after the war, 1865–66, was returned at \$ 281,000,000 currency.

time; worked less efficiently; received more (nominally, at least) in compensation for its effort, and consumed more, absolutely. Under such conditions, whatever there was of labor in the country, which under ordinary circumstances of supply and demand, labor-saving machinery and processes, would have made surplus, continued to find full opportunity for employment, and the day of industrial disturbance did not come. It delayed coming so long that to many who endeavored to acquaint themselves with the reason of things and the experience of other nations, it seemed as though the special providence described by an old diplomat as ordained for infants, drunken men, and the United States really existed; that it carried us along prosperously as a nation, in spite of our manifold economic transgressions, and that we constituted a peculiar country and people, in and among which what had been elsewhere regarded as natural laws did not and never would prevail.\*

But natural laws have at last prevailed, and the day of industrial disturbance has at last come. Artificial stimulants to production and consumption in the form of paper money, irredeemable and therefore excessive; high discriminating taxes imposed to foster special industries; and extravagant ideas engendered by the war, no longer avail to stimulate; and consumption of every kind having been reduced to the requirements of almost absolute necessity, and investments of capital in constructions looking to future and larger production having been almost entirely suspended, the question of almost transcendent importance before the country to-day is: *What disposition is it proposed to make of the labor of the country which labor-saving machinery and new methods of business have now, for the first time, and under existing conditions, made manifestly surplus?* What is it proposed to do about the 466 cotton-operatives and food-producers which were formerly required by every cotton-mill in the country of 7,000 spindles, making No. 14 yarn, to supply the demand for cotton fabrics, but whose labor has now

---

\* One of the most remarkable examples of economic prophecy, founded on cold, scientific reasoning from hard, positive facts, and natural laws, and which time is working to exact fulfilment, is to be found in Chap. III. of "Some Leading Principles in Political Economy newly expounded," by the late Professor Cairnes of University College, London; in which the author, writing in 1873, before the panic of that year, predicts the present financial and industrial disturbance in the United States, and shows why its occurrence is a necessity from previous economic conditions.

been supplemented by machinery, and has not been permanently absorbed by other employments? What about the three men out of every six that within a more recent period have been notified that their labor was never to be again proportionally wanted in the manufacture of stoves and of boots and shoes; of the seven women out of every ten in the straw hat manufacture; and what of the even possibly still larger proportion of laborers that have been already, or in the immediate future are likely to be, for similar causes, permanently thrown out of employment in other industries? An estimate by Mr. Atkinson of Boston, founded on extensive investigation, is, that "at present about *ninety* per cent of our population, using improved tools and machines, can produce all that one hundred per cent can consume of the staple articles of food, fuel, clothing, tools, wares, and the like, which constitute the great bulk of our consumption, and can, in addition, produce all that we have yet been able to find a market for abroad"; leaving ten per cent, or thereabout, of the population without any opportunity for employment. Reasoning, however, from the difference in the ratio of increase in population and the so-called "manufacturing power" from 1860 to 1870, as shown by the returns of the last census, and also from the data afforded by the analysis and comparison of the conditions of almost any special industry of the country as prosecuted in 1860 and 1876, the surplus labor of the United States at present *wanting* and willing as well as needing and seeking employment would seem to be larger than the estimates assumed by Mr. Atkinson. At the same time it ought to be clearly understood that the data available for making any estimates on this subject are not of a kind that will warrant anything more than approximately correct opinions.

In a general sense, and in the long run, all such results as have been noted of the increased power of production for a given amount of human labor ought to be most gratifying; for it is the regular and permanent large excess of production over consumption that constitutes the surest, or, rather, the only basis for large permanent remuneration for both labor and capital. Such results, furthermore, are in fact long strides in the path of progress towards a millennial period, when the forces of nature shall be so much further subordinated and brought under our control as to do all of our work for us, instead of as now doing but a part; and when poverty and the

masses — the wolf and the lamb of modern civilization — shall through the attainment of an all-sufficient abundance, be no longer, the inevitable reciprocals they now are. Increased and cheaper facilities for the movement of capital and the distribution of product work in the same direction, for they bring producer and consumer nearer together, economize time and risk, and diminish waste and taxes. But for the present the question of importance is, not in respect to the ultimate good resulting from these changes in the conditions of production, but in respect to the disturbance and harm that are happening in the adjustment of labor and capital to the new conditions.

There is another feature in the present industrial and social condition of affairs which is well worthy of attention. Heretofore owing to various circumstances, there has been no country in which a man, through industry and economy, could so rapidly and easily raise himself from the position of a laborer, dependent on others for employment, to the position of a capitalist, himself controlling employment, as in the United States. But the conditions for effecting such desirable social and economic changes are every year becoming less and less favorable. Labor-saving machinery, by the use of which alone can production be carried on to the best advantage, is expensive, and in general is not at the ready disposal of those whose only capital is their hands and their brains. The sharp competition in all exchanging (buying and selling) has also so reduced the rate of average profit that the transaction of large business is essential to the realization of any considerable gain. But the transaction of large business in most cases requires the use or control of large capital, which, in turn, represents previous accumulated labor.\* Note also the changes affecting the prospects of the American laborer without capital, growing out of the change in respect to the occupation and tillage of new lands. Formerly

---

\* The following incidental paragraph in a letter on other subjects, written under date of May 11, 1876, by the head of one of the largest and most successful houses in the drug-trade, is extremely pertinent and suggestive: "Our own business, I am pleased to say, was never better than at present; but this is due to regrettable causes. During the past few years a great many houses have succumbed under the stringency of the times, and we have at present more intelligent competition than usual. The weak and inexperienced have failed, and no young men begin in these times. Where will this end? what will become of our young men? is a problem for serious consideration."

an enterprising man without capital could, as the result of a few years' service as a laborer at the West, acquire sufficient means to enable him to enter upon a tract of fertile government land, and put it, in all or part, under immediate cultivation. The result of the first year's crops not unfrequently reimbursed him for all his expenditures, and made him a capitalist, independent and with means sufficient for attaining larger results through greater production. But the opportunity for achieving such results, although perhaps not terminated, is rapidly drawing to a close. The quantity of fertile public land suitable for farm purposes which can now be obtained by pre-emption or at nominal prices is comparatively limited, if not nearly exhausted. According to Major Powell (in a communication recently made to the National Academy), "all the good public lands fit for settlement are sold. There is not left unsold in the whole United States, of land which a poor man could turn into a farm, enough to make one average county in Wisconsin. The exception to this statement, if it is open to any, may perhaps be found in Texas or the Indian Territory, elsewhere it is true." And in respect to the arid region of the plains, which, it is alleged, is eminently fitted for grazing, Major Powell further says: "In this whole region, land as mere land is of no value; what is really valuable is the water privilege. Rich men and stock companies have appropriated all the streams, and they charge for the use of the water. Government sections of one hundred and sixty acres that do not contain water are practically, or at all events comparatively, worthless."

But whether these statements be fully warranted or not,\* there can be no question that the time draws near when the wave of population, which for so many years has uninterruptedly flowed

---

\* Since the publication of Major Powell's paper various protests have been made against the full acceptance of his conclusions. The northern half of Nebraska and all of Dakota, which have been generally believed to be arid regions without rainfall sufficient for agricultural purposes, are declared, by persons professing to speak with authority, to contain a greater proportion of fertile lands than either Wisconsin or Michigan; and that Western Minnesota, which is in large part yet unoccupied, is more fertile and productive than the eastern portion of that State. The simple fact, that the question as to how much, or if any considerable amount of fertile public land in the United States yet remains unappropriated, has come to be a matter of controversy, is, however, conclusive that the conditions of national abundance in this particular are very far from being what they were at a comparatively recent period.

westward from the Atlantic, will reach a natural limit; and that thereafter its tendency will be to stop, and possibly flow backwards. But when this change takes place, if it has not already commenced, the United States will have entered upon a new social order of things; an order of things similar to what exists in the more densely populated countries of the Old World, in which the tendency is for a man born a laborer, working for hire, to never be anything but a laborer.

But, coming back to the more immediate question under consideration, namely, what it is proposed to do *now* with the labor of the country that improved methods and machinery of production have made in excess of *any present demand*, the answer will most certainly be found to consist in one of two alternatives. Either new wants have got to be found or created, for the supplying of which a larger field for the employment of labor will be afforded than now exists; or else the emigration of labor from the country and the formation of a permanent pauper class among us will begin. And contingent upon the success of those to whom it is given to mould and administer the policy of the country, in creating these new and enlarged wants or demands for our products, and as a consequence new and enlarged employments for our labor, is the time when commerce will revive, manufacturing be extended, railroads and other corporate enterprises become profitable, the consumption of coal increase, real estate appreciate, and labor be in demand; in short, when the whole country will again become prosperous. But while the nation waits, not clearly perceiving the nature of the problem forced upon it for consideration, and having thus far taken but one step towards its solution,—namely, the restoration of domestic peace,—immigration rapidly diminishes,\* emigration begins, and pauperism increases; labor of foreign birth returning in crowds to the land of its nativity; labor

---

\* The total alien immigration into the United States for the fiscal year 1876 was 169,986 (calendar year 157,440), as compared with 209,036 for the fiscal year 1875, and 449,483 for 1872. Offsetting the emigration of persons of alien birth, the United States for the first time in many years, perhaps for the first year since the country was originally settled by Europeans, probably had no augmentation of its population in 1876 by reason of the change of residence of persons of foreign nativity. The reports of the British Board of Trade, show that while for 1876 the emigration from Great Britain into the United States was 54,554, the immigration into Great Britain from the United States during the same year was 54,697; or the United

of American birth asking for opportunity to seek new homes in Australia; while the reports from one of our oldest and richest States — Massachusetts — show an increase in number of recipients of public charity between 1873 and 1877 of about *fifty* per cent.

How to create these new wants, how to find new avenues for trade or enlarge those already existing, and how thereby to find or develop new employments for the masses, are therefore the most important questions of the hour that can occupy the attention of the statesman, the legislator, and the merchant; those whose business it is to educate through the school or the press, those whose mission it is to teach morality and religion. We repeat, *more especially*, those whose mission it is to teach morality and religion, because there is no greater or more insurmountable obstacle in the way of intellectual, moral, or religious growth than poverty. When the stomach clamors, when the back is bare, and the hands and feet are cold, there is little place in the mind of any person except for thoughts relating to the satisfaction of the animal. When the New York Prison Association state, as they do, in one of their recent reports, that crime is increasing in New York and New England and in other parts of this country in an alarming ratio — in a ratio greater than is manifest in England and Ireland — they present a case which is not to be primarily remedied by the preaching of sermons or the singing of hymns. And if half the time spent in preaching sermons and singing hymns, and in metaphysical discussions as to whether the Pope is the “man of sin,” and “whether modern culture tends to infidelity,” were spent in inquiring *why it is* that in this country, with all the elements of abundance, we have enforced idleness, increasing poverty, and, consequently, increasing crime; why it is that people who pass out of churches and tabernacles where sermons

---

States sent more persons to England, Ireland, and Scotland in 1876 than was drawn from these same countries. In respect to emigration from Great Britain to Canada the Board of Trade reports that it “has fallen to the smallest dimensions, if it has not altogether been suspended”; and “that, in fact, the records of 1876 are the records of a movement of passengers to and fro,” and not in any real sense “emigration” at all. On the other hand, the emigration to the Australian Colonies from Great Britain, on the whole, was well maintained; the emigrants to Australia and New Zealand for 1876 numbering 32,196, while the immigrants were only 2,597.

are preached and hymns sung, pass out into an atmosphere so crammed with unnatural necessities that overcome virtue, and with artificial temptations to do wrong so powerful that human nature, as ordinarily constituted, cannot resist, there would be more souls made happy in this world, and more probably saved for the next, than there now is.

But in respect to these new wants, new avenues for trade, and consequent new employments, can they be created, it may be asked, if all whose business it is should give the matter earnest attention? We answer unhesitatingly, that in respect to the United States, and to the present emergency, it is not only possible, but comparatively easy, to effect such results. But the demonstration of the *how*, and the presentation of evidence sufficient to enable each person who has followed this line of argument and investigation to arrive at an independent judgment and a self-answer, is a work to be entered upon separately.

DAVID A. WELLS.